

US006025808A

4,962,383 10/1990 Tresselt ....... 343/700 MS 5,065,163 11/1991 Mears ...... 343/877 X

0251209 11/1986 Japan ...... 343/749

FOREIGN PATENT DOCUMENTS

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2/1992 Pizon ...... 343/749 X

6/1993 Rammos et al. ...... 343/853 X

Japan ...... 343/749

## United States Patent [19]

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[56]

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[54]	PASSIVE SURFACE DEPLOYED VARIABLE INDUCTANCE WIRE ANTENNA		
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[52]	U.S. Cl		
		343/830	
[58]	Field of S	earch	

[57]	ABSTRAC

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An antenna adapted for surface deployment is provided. A coaxial feedline, terminated at one end thereof at a feedpoint, has a center conductor and a shield at ground potential. A continuous length of antenna wire having first and second ends is electrically connected at its first end to the center conductor at the feedpoint. A first portion of the continuous length is spooled adjacent the first end. A second portion of the continuous length is deployed from the first portion by means of tension at the second end. The second portion extends to the second end along a substantially straight line away from the first portion. The second portion is typically at least as long as the first portion. The first portion serves as a variable tuning inductor for the antenna

## References Cited

## U.S. PATENT DOCUMENTS

745, 750, 719; H01Q 9/00

	• . •	
1,424,365	8/1922	Loftin et al 343/723
2,177,415	10/1939	Alford 343/749
2.982,964	5/1961	Bresk et al 343/750 X
3,273,153	9/1966	Icenbice, Jr 343/707
4,067,235	1/1978	Markland et al 73/146.5
4,117,495	9/1978	Hochstein 343/745 X
4,743,917	5/1988	Huntsman et al 343/877
4,750,001	6/1988	Grose et al 343/877

## 17 Claims, 2 Drawing Sheets

as the second portion is deployed therefrom.

